

**Patient Name: Brutus Buckeye**  
**Gender: M**  
**Date of Birth: 10/30/1965**  
**Patient ID: 123456**

**Date of Report: 11/21/2022**  
**Date of Study: 11/15/2022**  
**Date Received: 11/20/2022**  
**Referred By: Dr. Columbus Ohio**  
**Referring Department: External Practice**

**CLINICAL HISTORY:** Evaluation for mandibular fractures after patient reported trauma and airway analysis

**IMAGING TECHNIQUE:** Noise and scatter limited medium volume cone-beam computed tomography (CBCT) study of the maxilla and mandible

**RADIOGRAPHIC FINDINGS:** All imaged anatomic structures in this study have been evaluated. Significant findings include the following:

**MAXILLA & MANDIBLE:**

- Non-displaced bony fractures in the right ramus (extends from the coronoid process posteriorly just below the condylar neck) and left parasymphyseal region (extends from the inferior border supero-obliquely to the regions of #22-#24)
- Periosteal new bone formation along the buccal and lingual cortices around the region of the fracture in the right ramus
- Generally osteopenic appearance of the maxillary and mandibular alveolar bone, with diminished density, sparse trabeculation, and large marrow spaces

**DENTAL FINDINGS:**

- Missing #16
- Generalized attrition
- Multiple teeth with blunted roots

**SINUSES & NASAL FOSSA:**

- Mild soft tissue swelling within the left maxillary sinus (ostium not imaged)

**TEMPOROMANDIBULAR JOINT (TMJ) REGIONS:**

- Both mandibular condyles are not fully imaged and cannot be fully evaluated; however, mild beaking/flattening of the articular surface of the left mandibular condyle is visualized

**CERVICAL VERTEBRAE:**

- Mild osteoarthritic changes in the C1-C4 regions, with osteophyte formation, osteosclerosis, and reduced intervertebral joint spaces

**AIRWAY:**

- The minimum cross-sectional area of the oropharyngeal airway approximately measures at 193.9mm<sup>2</sup> (the patient is not at risk for obstructive sleep apnea)
- Airway analysis files are also provided

**OTHERS:**

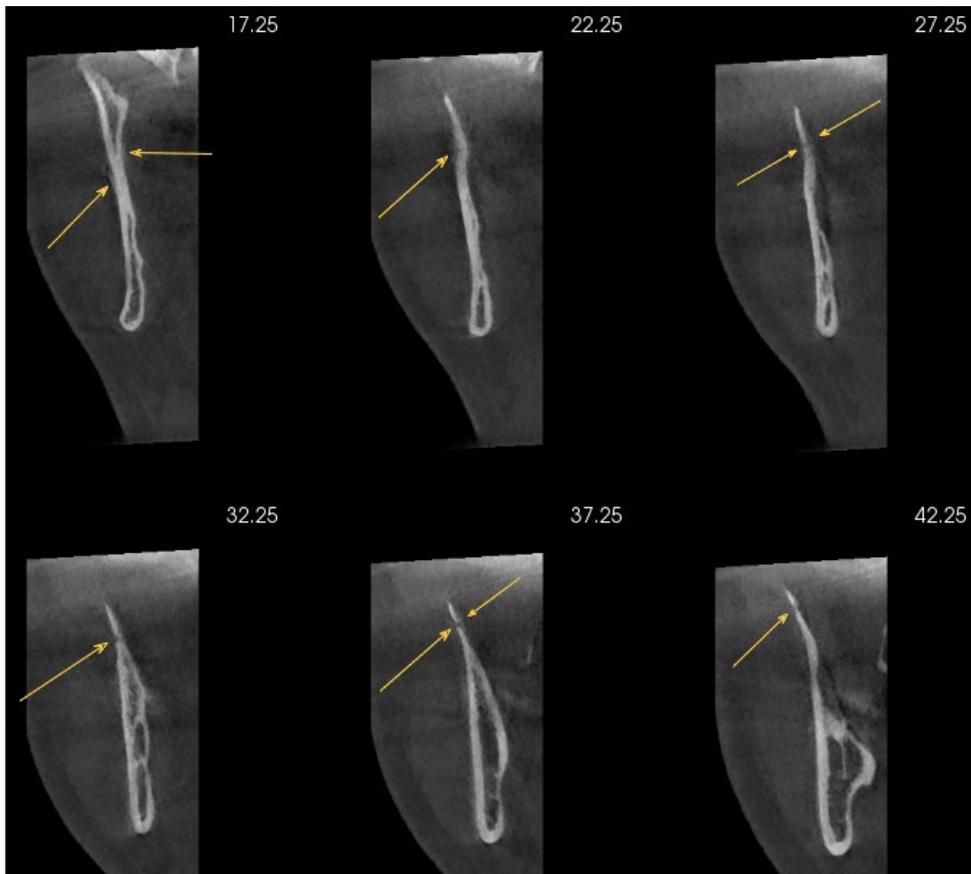
- Partially ossified stylohyoid ligaments bilaterally

**IMPRESSIONS:**

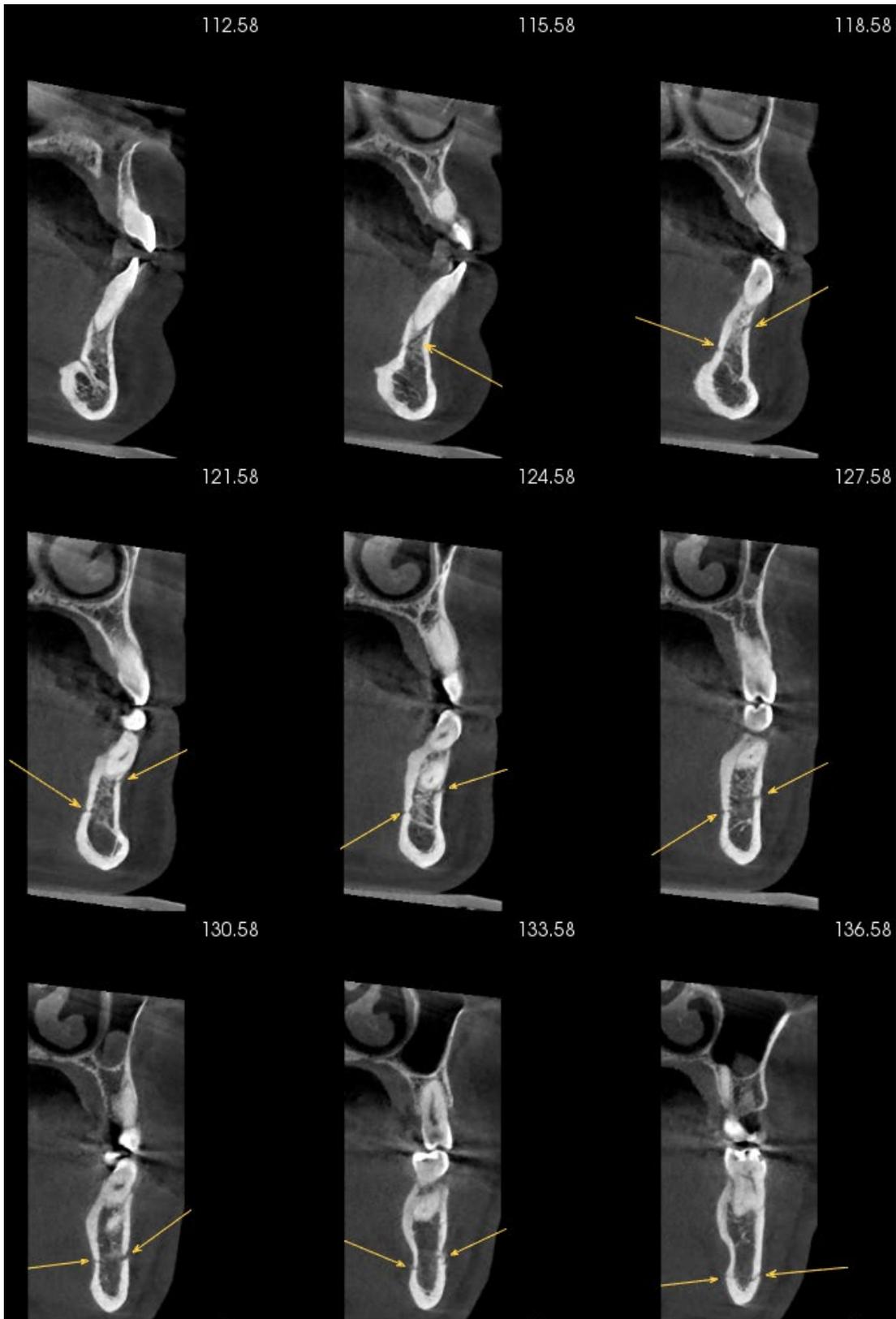
1. Multiple non-displaced fractures within the right ramus and left parasymphysis of the mandible as described above are noted. The radiographic appearance of the as described above may suggest secondary inflammation, most consistent with osteomyelitis. A referral to an oral surgeon for surgical debridement may be indicated.



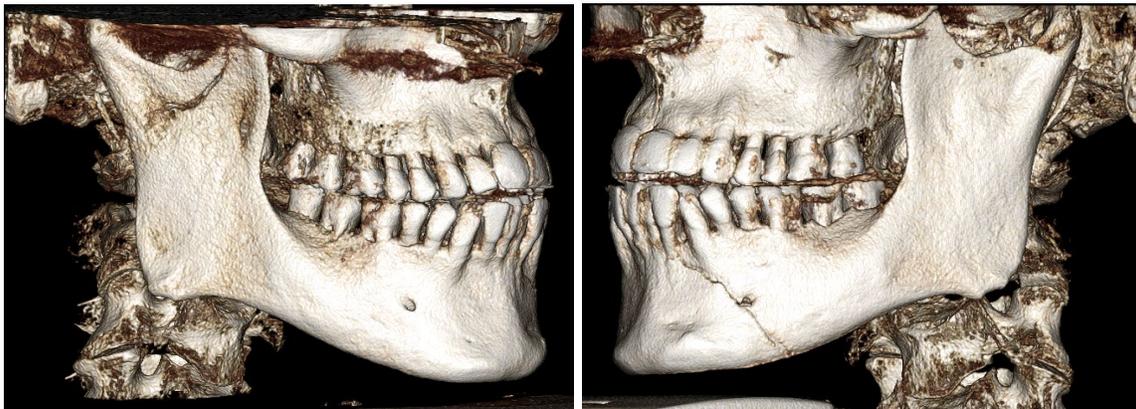
Panoramic reconstruction



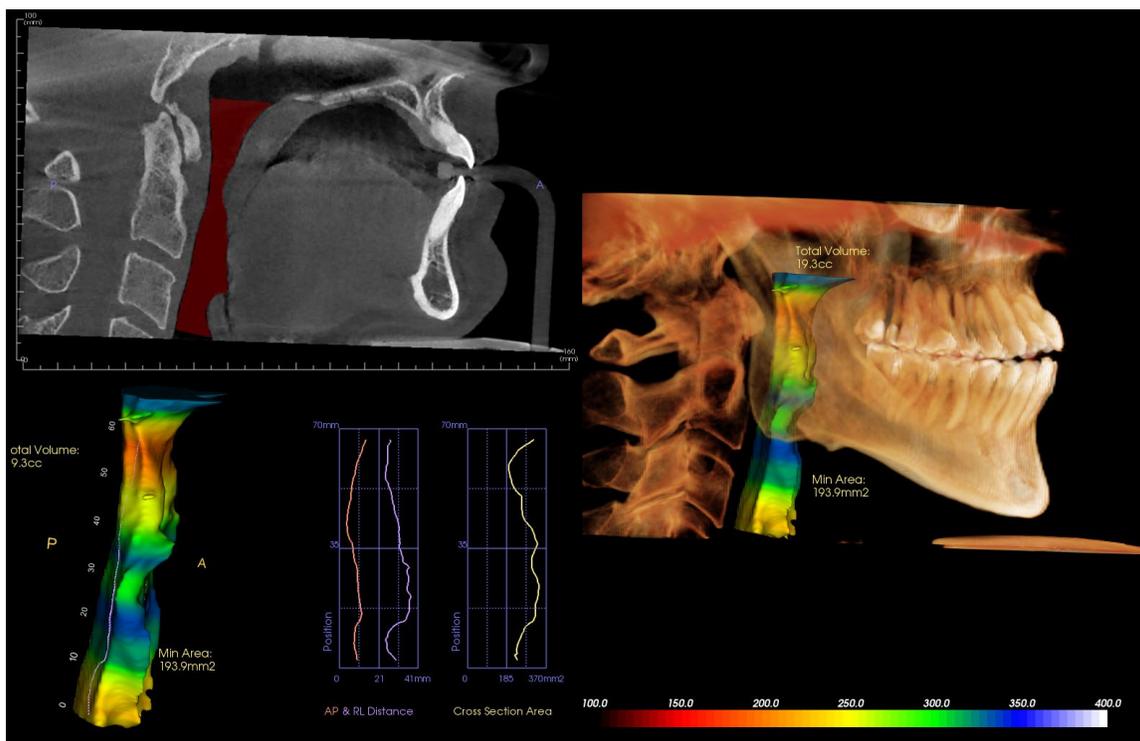
Cross-sectional images of the right coronoid process and ramus (arrows point to fractures and periosteal new bone formation)



Cross-sectional images of the left mandible (arrows indicate fractures)



Bony surface reconstructions



Airway analysis